

THE CHARACTERS AND RANGE OF CAREX
LAEVIVAGINATA.

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IN 1909, in his treatment of *Carex* in Engler's *Pflanzenreich*, Kükenthal described from Biltmore, North Carolina, *Carex stipata*, var. *laevivaginata*.¹ In typical *C. stipata* the broadish flaccid leaves have the scarious cross-puckered sheath slightly prolonged at the orifice into a very thin membrane; but in var. *laevivaginata*, as described by Kükenthal, the leaves are firmer and narrower (3 mm. broad), with the sheath plane (not cross puckerd) and thickened at the orifice; and the inflorescence is shorter than in typical *C. stipata*. Subsequently, but without amplification of the characters, Mackenzie has elevated the plant to specific rank as *C. laevivaginata* (Kükenth.) Mackenzie² and has extended the range to Maryland.

That *Carex laevivaginata* is a distinct species of definite range now seems fairly clear, for a considerable mass of specimens in the Gray Herbarium and the Herbarium of the New England Botanical Club shows it to have not only the characters already emphasized but some others to which attention is here directed, and to occur somewhat generally in damp rich woods and swamps of the Alleghanian region. The most striking character of the plant, besides its firmer and narrower leaves and smooth sheaths with firm often cartilaginous orifice, is its much greener and simpler inflorescences. In *C. stipata* the crowded often somewhat paniculate inflorescence has a yellowish color and in age becomes quite brown; and the perigynia are about 4 mm. long. In *C. laevivaginata*, on the other hand, the inflorescence is simpler and looser, at first pale-green, but in maturity with a very slight brownish tinge; and the perigynia are 5–6.5 mm. long, thus giving the cylindric head an even more muricate appearance than in *C. stipata*.

Carex stipata is a plant of the Canadian and Transition Zones, occurring in wet habitats from Newfoundland to British Columbia, southward to the District of Columbia, Virginia, the Great Lake states, Iowa, Kansas, New Mexico and California; with an extremely large

¹ Kükenth. in Engler, *Pflanzenr.* iv. Fam. 20, 172 (1909).

² Mackenzie in Britton & Brown, *Ill. Fl.* ed. 2, i. 371 (1913).

variety, var. *uberior* C. Mohr, in the Louisianian area from South Carolina to Florida and Texas. *C. laevivaginata*, on the other hand, is essentially Alleghanian, occurring from Massachusetts to North Carolina, Tennessee, and Illinois. Judged by its representation in herbaria it is much less common in New England than *C. stipata*. The herbarium material immediately accessible shows 88 sheets of *C. stipata* from New England, but only 11 sheets of *C. laevivaginata* representing the following 6 stations. MASSACHUSETTS: Purgatory Swamp, Norwood, June 16, 1878, *Faxon*, June 21, 1896, *E. F. Williams*, June 27, 1897, *Sidney Harris*; Williamstown, May 30, 1898, *J. R. Churchill*, June 17, 1901, *E. F. Williams*; swamp, Stockbridge, June 28, 1900, *Ralph Hoffmann*. RHODE ISLAND: without definite locality, *Olney*; Cat Swamp, Providence, July 2, 1893, *J. F. Collins*. CONNECTICUT: North Cromwell or Farmington, 1878, *Chas. Wright* (both *C. stipata* and *C. laevivaginata* with one label). Judge Churchill has recently informed the writer that *C. laevivaginata* is also found in rich soil near the Merrimac at Bradford, Massachusetts. The species is, however, so little known as yet that further information as to its local distribution and its habitat is needed.

GRAY HERBARIUM.

ARENARIA STRICTA IN THE WHITE MOUNTAINS.—In the seventh edition of Gray's Manual *Arenaria stricta* Michx. is reported as found on Mt. Washington, N. H., the citation being based upon a specimen collected by Mr. W. H. Manning. That this reference, however, is due to a transposition of labels and that the specimen upon which it is founded really came from Glens Falls, N. Y., has been convincingly shown (RHODORA, xi, 184-5) by Professor Fernald, who adds that the 'summit of a hill, Holderness, N. H.,' where the plant was collected in July, 1891, by Dr. R. C. Manning, is, so far as he knows, the only New Hampshire station for this species. It was of interest to me, therefore, on 19 July, 1915, while I was collecting on Hart's Ledge, at the southern extremity of the Montalban Range in the lower part of Crawford Notch in Coös and Carroll counties, thirteen miles south of Mt. Washington and about twenty-five miles northeast of Holderness, to find an abundance of this plant growing in woods, on damp rocks, along a steep and somewhat intermittent watercourse. This station is on the southeast side of the ledge in the township of